



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,036	08/21/2001	Marion A. Keyes	30203/37509	7791

4743	7590	02/01/2008
MARSHALL, GERSTEIN & BORUN LLP		
233 S. WACKER DRIVE, SUITE 6300		
SEARS TOWER		
CHICAGO, IL 60606		

EXAMINER
AILES, BENJAMIN A

ART UNIT	PAPER NUMBER
2142	

MAIL DATE	DELIVERY MODE
02/01/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/934,036

Applicant(s)

KEYES ET AL.

Examiner

Benjamin A. Ailes

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 39-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 39-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to correspondence filed 21 November 2007.
2. Claims 1-37 and 39-41 remain pending.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-11, 14-18, 35, 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Bradlee (U.S. 2002/0161624 A1).
5. Regarding claim 1, Bradlee discloses a data processing system for use with a process control system, the data processing system comprising:
  - a first processing plant (fig. 1, plant 12) communicatively coupled to an open network (fig. 1, network 46);
  - a second processing plant (fig. 1, plant n 24) communicatively coupled to the open network;
  - a primary server (fig. 1, repository 48) communicatively coupled to the open network, wherein the primary server is adapted to execute a data processing application (fig. 1, processor 56); and

a primary data historian (fig. 1, Database 52) communicatively coupled to the primary server, wherein the primary server is adapted to remotely receive process control information (p. 2, para. 0028, receive and process data) originated by a device (fig. 1, sensors 14, 26) of one of the first or second processing plants via the open network and to store a portion of the received process control information in the primary data historian (p. 3, para. 001, store data in the database) and wherein the primary server is further adapted to use the data processing application to generate analysis results from the process control information (p. 3, para. 0031, data processing based on business rules) and send the analysis results to the first and second plants via the open network (p. 3, para. 0032, transmit results to user machines).

6. Regarding claim 4, Bradlee discloses the system wherein the open network is the Internet (p. 3, para. 0031, Internet).

7. Regarding claim 5, Bradlee discloses the system wherein the first process plant is in a first geographic location and the second process plant is in a second geographic location different from the first geographic location (fig. 1, plant 12, plant n 24).

8. Regarding claim 6, Bradlee discloses the system wherein the first process plant is associated with a first business entity and the second process plant is associated with a second business entity (p. 3, para. 0036 and table 1, separate power plant entities).

9. Regarding claim 7, Bradlee discloses the system wherein the data processing application is adapted to perform one of a plant optimization function, a real-time process monitoring function, a data reconciliation function, a plant emission analysis

function, a plant emissions control function, a dispatch function, a plant control function and an alarming function (p. 2, para. 0023, emissions data report).

10. Regarding claim 8, Bradlee discloses the system wherein the data processing application is adapted to perform a data correction function (p. 3, para. 0031, data processing in view of rules).

11. Regarding claim 9, Bradlee discloses the system wherein the data correction function is one of a digital verification function, a data validation function, a data reconciliation function and a data source re-calibration function (p. 3, para. 0031, data integration functions).

12. Regarding claim 10, Bradlee discloses the system wherein the data processing application uses continuous emissions monitoring data to generate a plant emission report (p. 2, para. 0023, emissions data).

13. Regarding claim 11, Bradlee discloses the system wherein the data processing application generates the plant emissions report using a format defined by a governmental authority and communicates the plant emissions report to the governmental authority (p. 3, para. 0031, central repository user interface).

14. Regarding claim 14, Bradlee discloses the system wherein the data processing application uses an internet browser application as a visualization layer (p. 3, para. 0032, user machine includes a web browser).

15. Regarding claim 15, Bradlee discloses the system wherein the internet browser application is executed within a user interface that is physically remote from the first and second process plants (fig. 1, user machine is remotely located).

16. Regarding claim 16, Bradlee discloses the system wherein one of the first and second process plants further comprises one of an internet-enabled field device, an internet-enabled field device interface and a data concentration node (p. 2, para. 0028, sensors transmit digital signals).

17. Regarding claim 17, Bradlee discloses the system wherein the one of the internet-enabled field device, an internet-enabled field device interface and a data concentration node includes an embedded data server and an embedded data historian communicatively coupled to the embedded data server (p. 2, para. 0028 – plant sub-system).

18. Regarding claim 18, Bradlee discloses the system wherein one of the first and second plants includes a digital communication network based on one of an RS485, Foundation fieldbus, Ethernet TCP/IP and a wireless blue tooth protocol (p. 3, para. 0031 - Internet).

19. Regarding claim 35, Bradlee discloses a data processing system for use with a process control system, the data processing system comprising:

- a first processing plant (fig. 1, plant 12) communicatively coupled to an open network (fig. 1, network 46);

- a second processing plant (fig. 1, plant n) disparate from the first processing plant that is communicatively coupled to the open network (fig. 1, network 46);

- a remote user interface communicatively coupled to the open network (fig. 1, user machine);

a server (fig. 1, repository) communicatively coupled to the open network (fig. 1, network 46), wherein the server is adapted to execute a data processing application (p. 3, para. 0031, data processing based on business rules); and

a data historian (fig. 1, Database 52) communicatively coupled to the server, wherein the server is adapted to remotely receive process control information (p. 2, para. 0028, receive and process data) originated by a device of the first and second processing plants (fig. 1, sensors 14, 26) via the open network and to store a portion of the received process control information in the data historian (p. 3, para. 001, store data in the database) and wherein the server is further adapted to use the data processing application to generate analysis results from the process control information (p. 3, para. 0031, data processing based on business rules) and send the analysis results to the remote user interface via the open network (p. 3, para. 0032, transmit results to user machines).

20. Regarding claim 36, Bradlee discloses the system wherein the remote user interface is associated with a regulatory authority (p. 3, para. 0031, central repository user interface).

21. Regarding claim 40, Bradlee discloses the system wherein the second processing plant is disparate from the first processing plant (fig. 1, plant 12, plant n 24).

22. Regarding claim 41, Bradlee discloses the system wherein the first processing plant comprises first equipment necessary to carry out a first industrial process and the second processing plant comprises second equipment necessary to carry out a second industrial process (p. 2, para. 0021, acquire data from individual plants).

***Claim Rejections - 35 USC § 103***

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

25. Claims 2, 3, 20-29, 31-34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradlee in view of Agrusa et al. (US 2004/0024891 A1), hereinafter referred to as Agusa.

26. Regarding claim 2, Bradlee teaches the use of a primary server and a data historian to perform data processing methods needed by process control plants as discussed above in the rejection of claim 1, but does not explicitly teach a redundant server that is communicatively coupled to the primary server and the primary data historian, wherein the redundant server is adapted to maintain synchronization with the primary server and to supersede the primary server in response to one of a failure



indication and degradation indication associated with the primary server. The need to implement backup systems in all areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa teaches on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

27. Regarding claim 3, Bradlee teaches the use of a primary server and a data historian to perform data processing methods needed by process control plants as discussed above in the rejection of claim 1, but does not explicitly teach a redundant data historian that is communicatively coupled to the primary server, the redundant server and the primary data historian, wherein the redundant data historian is adapted to maintain data synchronization with the primary data historian and to supersede the primary data historian in response to one of a failure indication and degradation indication of the primary data historian. Simply put, Bradlee does not teach methods of backing up information in time of failure. The need to implement backup systems in all

areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa teaches on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

28. Regarding claim 20, Bradlee discloses a data processing system for use with a process control system, the data processing system comprising:

- a server (fig. 1, repository 48) that is communicatively coupled via a local network (fig. 1, network 46), wherein the server is adapted to acquire and process data (p. 2, para. 0028, receive and process data);

- a data historian (fig. 1, Database 52) that is communicatively coupled to the redundant server (fig. 1, DB 52 is connected to repository 48);

- a plurality of process plants (fig. 1, plants n) that are remotely and communicatively coupled to the server via an internet (fig. 1, connected to network 46), wherein the plurality of process plants is associated with a plurality of business entities

(p. 3, para. 0036 and table 1, separate power plant entities), and wherein the server is adapted to execute a data processing application that processes information originated by devices of the plurality of process plants (p. 3, para. 0031 - data processing is based on business rules) and generates from the information analysis results that are accessible by a user via the internet (p. 3, para. 0032, transmit results to user machines).

Bradlee teaches the use of a primary server and a data historian to perform data processing methods needed by process control plants as discussed above in the rejection of claim 20, but does not explicitly teach a cluster of redundant servers and a cluster of redundant data historians. Simply put, Bradlee does not teach methods of backing up information in time of failure by user of redundant systems. The need to implement backup systems in all areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa teaches on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system

is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

29. Regarding claim 21, Bradlee and Agrusa teach the system wherein the data processing application includes one of a data analysis tool, a remote process management tool, a process optimization tool, a continuous emissions monitoring and minimization tool, a distributed power management tool, a dispatch and optimization tool, a centralized multi-client HVAC system monitoring and maintenance management tool, a remote water and waste processing facility monitoring and control tool, a pharmaceutical process tool, a biotechnology process tool and a semiconductor process tool. (Bradlee, p. 2, para. 0023, emissions data report).

30. Regarding claim 22, Bradlee and Agrusa teach the system wherein one of the first and second process plants further comprises one of an internet-enabled field device, an internet-enabled field device interface and a data concentration node (p. 2, para. 0028, sensors transmit digital signals).

31. Regarding claim 23, Bradlee discloses the system wherein the one of the internet-enabled field device, an internet-enabled field device interface and a data concentration node includes an embedded data server and an embedded data historian communicatively coupled to the embedded data server (p. 2, para. 0028 – plant sub-system).

32. Regarding claim 24, Bradlee teaches a method of acquiring, analyzing and reporting process plant data, comprising the steps of:

remotely receiving information originated by a device (p. 3, para. 0031 - data processing is based on business rules) of at least one of a plurality of process plants associated with a plurality of business entities via an internet (p. 3, para. 0036 and table 1, separate power plant entities);

processing the remotely received information using a server associated with a vendor business entity (fig. 1, repository 48) that is different from the plurality of business entities to generate analysis results (fig. 1, plant n, repository server 48);

storing the analysis results in a data historian (fig. 1, Database 52) that is communicatively coupled to the server (fig. 1, database 52 is coupled to the repository server 48);

providing access to the analysis results via the internet (p. 3, para. 0032, transmit results to user machines via the internet); and

billing each of the plurality of business entities based on one of respective data usage and type and processing time (p. 3, para. 0031, data processing based on business rules).

Bradlee teaches the use of a primary server and a data historian to perform data processing methods needed by process control plants as discussed above in the rejection of claim 20, but does not explicitly teach a cluster of redundant servers and a cluster of redundant data historians. Simply put, Bradlee does not teach methods of backing up information in time of failure by use of redundant systems. The need to implement backup systems in all areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in

time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa teaches on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

33. Regarding claim 25, Bradlee and Agrusa teach the method wherein the step of receiving the information from the plurality of process plants includes the step of receiving a first part of the information from a first process plant in a first geographic location and a second part of the information from a second process plant is in a second geographic location that is physically remote from the first geographic location, wherein the first process plant is associated with a first one of the plurality of business entities and the second process plant is associated with a second one of the plurality of business entities (p. 2, para. 0021, acquire data from individual plants).

34. Regarding claim 26, Bradlee and Agrusa teach the method wherein the step of processing the received information includes the step of performing one of a plant optimization function, a real-time process monitoring function, a data reconciliation function, a plant emissions analysis function, a plant emissions control function, a

dispatch function, a plant control function and an alarming function (p. 2, para. 0023, emissions data report).

35. Regarding claim 27, Bradlee and Agrusa teach the method wherein the step of processing the received information using the cluster of redundant servers associated with the vendor business entity that is different from the plurality of business entities to generate the analysis results includes the step of performing a data correction function (p. 3, para. 0031, data processing in view of rules).

36. Regarding claim 28, Bradlee and Agrusa teach the method wherein the step of processing the received information using the cluster of redundant servers associated with the vendor business entity that is different from the plurality of business entities to generate the analysis results includes the step of using continuous emissions monitoring data to generate a plant emissions report (p. 2, para. 0023, emissions data).

37. Regarding claim 29, Bradlee and Agrusa teach the method wherein the step of using continuous emissions monitoring to generate the plant emissions report includes the step of using a format defined by a governmental authority (p. 3, para. 0031, central repository user interface).

38. Regarding claim 31, Bradlee and Agrusa teach the method further comprising the step of sending a first part of the received information from one of the plurality of process plants to the cluster of redundant servers using one of an interact-enabled field device, an interact-enabled field device interface and a data concentration node (p. 2, para. 0028, sensors transmit digital signals).

39. Regarding claim 32, Bradlee and Agrusa teach the method wherein the step of sending the first part of the information from the one of the plurality of process plants to the cluster of redundant servers using the one of an internet-enabled field device, an internet-enabled field device interface and a data concentration node includes the step of using an embedded data server to send the first part of the information. (p. 2, para. 0028 – plant sub-system).

40. Regarding claim 33, Bradlee and Agrusa teach the method wherein the step of billing each of the plurality of business entities includes the step of billing each of the plurality of business entities in accordance with one of a rental agreement, an off-book operating lease agreement and a financial lease agreement for respective costs that are less than the costs associated with the costs that would otherwise be incurred by each of the plurality of processing plants to generate the analysis results (p. 3, para. 0031, data processing based on business rules).

41. Regarding claim 34, Bradlee and Agrusa teach the method wherein the analysis results include cost accounting information for each of the plurality of processing plants (p. 3, para. 0031, data processing based on business rules).

42. Regarding claim 39, Bradlee teaches the use of a primary server and a data historian to perform data processing methods needed by process control plants as discussed above in the rejection of claim 1, but does not explicitly teach a redundant server communicatively coupled to the server, wherein the redundant server is adapted to maintain synchronization with the server and to supersede the server in response to one of a failure indication and degradation indication associated with the server. Simply



put, Bradlee does not teach methods of backing up information in time of failure. The need to implement backup systems in all areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa teaches on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

43. Claims 12, 13 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradlee in view of Keeler et al. (U.S. 5,386,373), hereinafter referred to as Keeler.

44. Regarding claim 12, Bradlee teaches the data processing application according to claim 1 above, but is silent on the use of plant emissions minimization and plant emissions optimization. However, in the related art of continuous emission monitoring, Keeler discloses multiple methods of achieving plant emissions minimization and optimization. By way of example, Keeler teaches a neural net technique used for minimization and optimization (see Keeler, col. 6, lines 8-55). It would have been

obvious to one of ordinary skill in the art at the time the application was made to combine the plant emissions minimization and optimization as disclosed by Keeler with the data processing application disclosed by Bradlee. One would have been motivated to make this combination in order to create a control system for emissions minimization and optimization (see Keeler, col. 7, lines 13-22, and 26-36).

45. Regarding claim 13, Bradlee teaches the data processing application according to claim 1 above, but is silent on the use of a compensatory control function. However, in the related art of continuous emission monitoring, Keeler teaches a method for achieving compensatory control. Keeler teaches a control function used for implementing a compensatory control function in order to optimize the inputs to the actual plant (see Keeler, col. 7, lines 12-46). It would have been obvious to one of ordinary skill in the art at the time the application was made to combine the plant emissions compensatory control function as disclosed by Keeler with the data processing application disclosed by Bradlee. One would have been motivated to make this combination in order to create a control system for emissions compensatory control (see Keeler, col. 7, lines 18-22).

46. Regarding claim 37, in accordance with claim 36, Bradlee teaches the need for a regulatory authority but does not explicitly state the use of the Environmental Protection Agency. Keeler teaches by way of example using the Environmental Protection Agency (EPA). One of ordinary skill in the art would have been motivated to associate with the EPA because the EPA is well known in the art as an existing

regulatory body in the government that sets up rules and regulations that industries must abide by (see Keeler, col. 1, lines 16-30, specifically lines 20-23).

47. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bradlee in view of Funkhouser (U.S. 5,784,570), hereinafter referred to as Funkhouser.

48. Regarding claim 19, Bradlee disclosed the need to send information between a client and a server (see Bradlee, col. 20, lines 3-14) but failed to disclose the use of a data compression technique. However, in related art, Funkhouser teaches the use of a data compressor that compresses the data before the data is transmitted from a server to a client (see Funkhouser, col. 2, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the application was made to utilize the data compression technique taught by Funkhouser with the client-server transmission method disclosed by Bradlee. One of ordinary skill in the art would have been motivated to make the combination in order to implement the client/server data transmission using data compression in order to allow for more effective bandwidth use and use less local memory (see Funkhouser, col. 2, lines 40-46).

49. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bradlee and Agrusa in view of Keeler.

50. Regarding claim 30, the combination of Bradlee and Agrusa teaches the data processing application according to claim 24 above, but is silent on the use of plant emissions minimization and plant emissions optimization. However, in the related art of continuous emission monitoring, Keeler discloses multiple methods of achieving plant emissions minimization and optimization. By way of example, Keeler teaches a neural

net technique used for minimization and optimization (see Keeler, col. 6, lines 8-55). It would have been obvious to one of ordinary skill in the art at the time the application was made to combine the plant emissions minimization and optimization as disclosed by Keeler with the data processing application disclosed by Bradlee and Agrusa. One would have been motivated to make this combination in order to create a control system for emissions minimization and optimization (see Keeler, col. 7, lines 13-22, and 26-36).

### ***Response to Arguments***

Applicant's arguments, see Remarks, filed 21 November 2007, with respect to the rejection(s) of claims 1, 4, 7-11, 14-18, 35, 36, 38 under 35 U.S.C. 102(e) as being anticipated by McIntyre et al. (U.S. 6,813,587 B2), claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over McIntyre, claims 2, 3, 20-34, 39 under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Agrusa et al. (U.S. 2004/0024891 A1), claims 12-13 and 37 under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Keeler et al. (U.S. 5,386,373) and claim 19 under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Funkhouser (U.S. 5,784,570) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bradlee (US 2002/0161624 A1), Agrusa et al. (U.S. 2004/0024891 A1), Keeler et al. (U.S. 5,386,373) and Funkhouser (U.S. 5,784,570).


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa

ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER  
  
ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER